

Work Order ID 58162

April 26, 2010 3:26:32 PM



Page 1

Item ID: D3752-1

Accept



Setup Start



Revision ID:

Item Name: Seat Frame

Stop



Start Date: 26/04/2010 Start Qty: 3.00



Cust Item ID:

Required Date: 04/05/2010 Req'd Qty: 3.00



Customer:

Reference:

Approvals:

Process Plan: *H*Date: *10-4-26*

Tooling:

Date:

Run Start



QC:

Date: _____

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr
D3752	Rev C

100



HandThermo

Hand Finishing Thermoforming

Memo

0.00

0.00

105



Dry Material

0.00

HandThermo

Hand Finishing Thermoforming

Memo

0.00

Dry Sheet as per QSI022 POLYCARBONATE

Temp: *140°F**04/10/04/26*Time IN: *4:00 pm.**04/10/04/26*Time OUT: *7:00 am.**04/10/04/27**04/10/04/26 (x3)**PTO, →**04/10/04/26 (x5)*

W/O: 58162

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/04/26	100-	NOTE: MOULD WAS REWORKED PRIOR TO THERMOFORMING PARTS. Height of the back rest was lengthened, to conform to drawing. First part off was used to verify fit.	OF	10/04/27		10.04.27	S 10/04/26

Part No: D3752-1 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 58162

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Page 2

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

110



Thermoform

Thermoforming Machine

120



QC

Quality Control

Memo
Thermoform as per Dwg. D3752 and folio (FTA022) using tool DT 8997
Dwg. Rev. C
Folio Rev. B

130



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

QC8- Inspect parts - second check

0.00

Memo

0.00

Dr. 10/04/27 X3Dr. 10/04/27 X2

30/04/27 X3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 58162

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Item ID: D3752-1

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Revision ID:

Item Name: Seat Frame

Stop



Start Date: 26/04/2010 Start Qty: 3.00



Cust Item ID:

Required Date: 04/05/2010 Req'd Qty: 3.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

140



HandThermo

Operation
Description

Memo

Set Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

18. 10/04/27 13

Hand Finishing Thermoforming

1) Trim to Finished Dimensions

150



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

18. 10/04/27 13

Memo

0.00

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S104128

Memo

0.00

tested in seat frame

Fits good

(TS)

Ph →

W/O: 58162		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/04/20	160	Keeps 1 unit for R+D use.	W.H.	10/04/20	1	A 10/04/20	

Part No: D 3752-1 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 58162

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Item ID: D3752-1

Accept



Setup Start



Revision ID:

Item Name: Seat Frame

Stop



Start Date: 26/04/2010 Start Qty: 3.00



Cust Item ID:

Required Date: 04/05/2010 Req'd Qty: 3.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

170



Packaging

Packaging

Operation
DescriptionIdentify as per dwg & Stock Location 251ASet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

10-4-29

2009

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/04/30

MF
10-4-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April 26, 2010 3:26:36 PM

Page 1

Work Order ID: 58162



Parent Item: D3752-1



Parent Item Name: Seat Frame

Start Date: 26/04/2010

Required Date: 04/05/2010

Comments: IPP REV: A New Issue 08.06.03 DL verified by:DD

Start Qty: 3.00

IPP Rev. B Dwg. Update 08/07/22 DL IPP Rev. C
Dwg. Update Shorter length 08/10/28 DL IPP Rev D Add Step 105
Dry Material 10/04/21 DL

Required Qty: 3.00

MLEXS.125-F60029-04

Purchased No

100

sf

2,635.532 32.0010



GE PLASTICS LEXAN SHEET

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

MAT

2635.5328

111710
112585
114032

64
224
2347.5328

112585

Dh, 04/04/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	58142
Description: Seat Frame	Part Number:	D3752-1
Inspection Dwg: D3752 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Shape Definition	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			
Edges and corners such as thinness, cracks and sharp edges	✓			

Measured by: *JH.*

Date: *10/04/27*

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.028	Min	0.029	✓			
0.035	Min	0.049"	✓			
0.040	Min	0.057	✓			
0.075	Min	0.101"	✓			
0.052	Min	0.084"	✓			
0.021	Min	0.0244	✓			
0.036	Min	0.055"	✓			

Measured by: *JH.*

Date: *10/04/27*

Audited by: *BB*

Date: *10/04/27*

Prototype Approval:

Date:

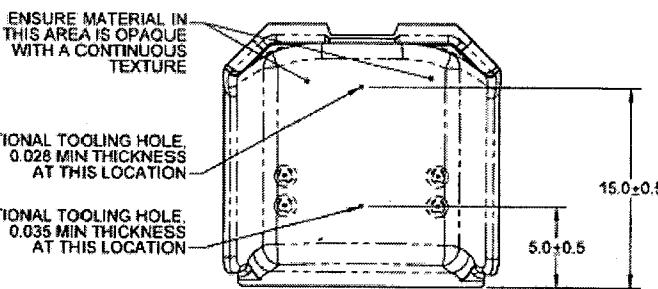
Rev	Date	Change	Revised by	Approved
A	08.11.28	New Issue	KJ/DL <i>BB</i>	<i>JM</i>

W/O:		WORK ORDER CHANGES						
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

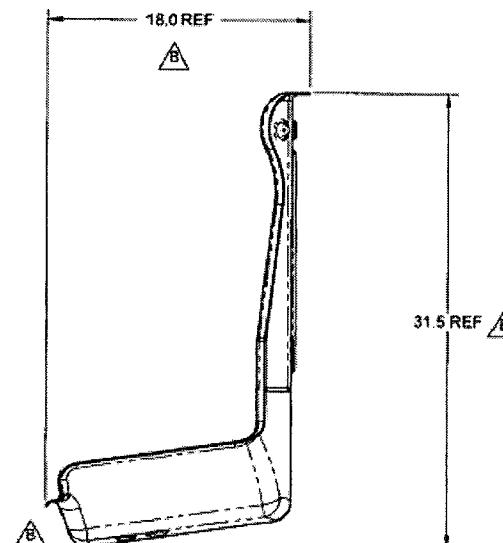
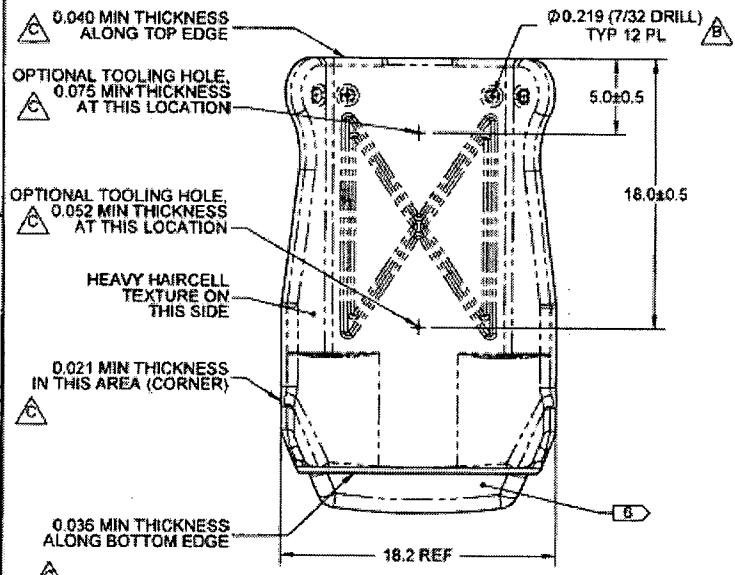
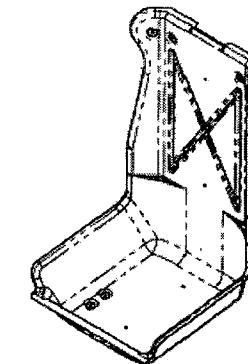
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NOTE: Date & initial all entries



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 58162
RD10-4-24



D3752-1 SEAT FRAME

NOTES:

- 1) MATERIAL: F60029 LEXAN SHEET (HEAVY HAIRCELL TEXTURE), 0.125 THICK, GY3778 COLOR (DARK GREY) (REF DART SPEC. MLEXS.125-F60029-04).
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART PIN "D3752-1" & B/N "XXXXXX" USING VIBRATING STYLUS
- 7) WEIGHT: 3.0 lbs
- 8) THERMOFORM PER DT8997 AND QSI 022. ORIENT TEXTURE AS SHOWN. TRIM TO MOLD.

D	REDUCE THICKNESS: 0.040 WAS 0.050 (ZN CB-1), 0.075 WAS 0.100 (CB-1), 0.052 WAS 0.050 (BB-1), 0.021 WAS 0.030 (BB-1), 0.038 WAS 0.060 (AN-1), 0.028 WAS 0.035 (LB-1), 0.035 WAS 0.050 (DB-1). SOME HOLES NOW OPTIONAL (AB-1 TO DS-1)	CP	08.10.08
B	FRONT PORTION NOW SHORTER (BS-1). 18.0 WAS 19.6 (CA-1). 31.5 WAS 31.3 (BS-1). ADD 4 HOLES FOR THICKNESS MEASUREMENT (DS-1, BB-1)	CP	08.09.09
A	NEW ISSUE	CP	08.04.25
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>90</i>	DART AEROSPACE LTD	
DRAWN	<i>90</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>94</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>94</i>	D3752	SHEET 1 OF 1
APPROVED	<i>94</i>	TITLE	SCALE
DE APPR.	<i>94</i>	SEAT FRAME	NTS
DATE	08.10.08	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS RESTRICTED FROM DISCLOSURE AND FROM USE FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PROVIDED. IT MAY NOT BE COPIED OR REPRODUCED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

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